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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/646,830   | 08/25/2003  | Steven A. Melman     | 47981.101           | 1350             |
| 37752  | 7590        | 07/28/2006           | EXAMINER            |                  |
| EPSTEIN BECKER & GREEN, P.C.<br>1227 25TH STREET, N.W. 7TH FLOOR<br>WASHINGTON, DC 20037 |             |                      | ROBERTS, LEZAH      |                  |
|  |             |                      | ART UNIT            | PAPER NUMBER     |
|  |             |                      | 1614                |                  |

DATE MAILED: 07/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                                      |  |  |
|------------------------------|--------------------------------------|--|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/646,830 | <b>Applicant(s)</b><br>MELMAN, STEVEN A. |  |
|                              | <b>Examiner</b><br>Lezah W. Roberts  | <b>Art Unit</b><br>1614                  |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 08 May 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-6,8-10 and 12-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6,8-10 and 12-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

This office action is in response to the Amendment filed May 8, 2006. All rejections have been withdrawn unless stated below.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

### *Claims*

#### **Claim Rejections - 35 USC § 102- Anticipation (Previous Rejection)**

1) Claims 8-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Prencipe et al. (US 5,256,402). The rejection is maintained. It is withdrawn in regards to cancelled claim 11.

Applicant argues the amended claim sets the limitation of about 0.05% sodium hexametaphosphate and the reference teaches about 0.5% to 8% sodium hexameta phosphate in the disclosed compositions. Accordingly, Prencipe et al. teaches an amount of sodium hexametaphosphate in combination with an acidulating agent that is much greater as claimed in the amended instant claim 8. This argument is not persuasive. Applicant as well as the reference uses the term about 0.05% and about 0.5% to about 8.0%, respectively. The term "about" permits some tolerance. See, for example, *In re Ayers*, 69 USPQ 109 (CCPA 1946), where "at least about 10%" was held to be anticipated by a teaching of a content "not to exceed about 8%." Therefore, the

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phrase "about 0.05%" recited in the instant claims encompasses the phrase "about 0.5%" in the reference and vice versa, as set by cited precedent.

**Claim Rejections - 35 USC § 102 – Anticipation (New Rejection)**

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1) Claims 1, 3 and 6 are rejected under 35 U.S.C. 102(e) as being anticipated by Glandorf et al. (US 6,555,094).

Glandorf et al. teach oral compositions, including a polymeric surface-active agent, which may be incorporated into a relatively supple but strong and durable material such as rawhide, ropes made from natural or synthetic fibers, and polymeric articles made from nylon, polyester or thermoplastic polyurethane. As the animal chews, licks or gnaws the product, the incorporated active elements are released into the animal's oral cavity into a salivary medium, comparable to an effective brushing or rinsing. The polymeric surface-active agents used include sodium hexametaphosphate (col. 8, lines 53-62). The surface-active agent may be incorporated into the compositions at concentrations ranging from about 1% to about 35% (col. 9, lines 24-28). The compositions may also include buffering agents. Preferred buffering agents include acetic acid and are used at a level preferably from about 1% to about 10%, and more preferably from about 1.5% to about 3%, by weight of the composition. The

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reference anticipates the claims insofar as it teaches rawhide chews comprising acetic acid and sodium hexametaphosphate.

**Claim Rejections - 35 USC § 103 – Obviousness (Previous Rejection)**

1) Claims 1, 5, and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Asami et al. (US 5,460,802) in view of Axelrod (US 4,924,811). The rejection is maintained in regards to claim 1 and 5. It is withdrawn in regards to cancelled claim 7.

Applicant argues the rope of Axelrod '811 is not ingestible and consists of nylon. In contrast thereto, the dog treat, chew or toy is ingestible and also provides nutritious benefits. This argument is not persuasive. Applicant does not set the limitation that the dog treat, chew or toy is ingestible. Furthermore, in the case of a dog toy, one would not consider a dog "toy" as ingestible. In claim 4, which is not encompassed by this rejection, the dog toy is an nylon bone, which Applicant submits is not ingestible, therefore, it is concluded the treat, chew or toy does not have to ingestible.

2) Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Asami et al. in view of Axelrod (6,093,427). The rejection is maintained.

Applicant argues Asami teaches much higher amounts of acetic acid than claimed in the present invention. In fact at higher concentrations taught by Asami, the composition becomes increasingly unpalatable, thereby decreasing the animal's desire to eat or chew the treat, chew or toy. Applicant also submits the combined teachings does not teach or suggest a dog treat, chew or toy comprising acetic acid and sodium

hexametaphosphate with amounts of acetic acid of about 1%. This argument is not persuasive. Applicant as well as the reference uses the term about 1% and about 2% to about 10%, respectively. The term "about" permits some tolerance. See, for example, In re Ayers, 69 USPQ 109 (CCPA 1946), where "at least about 10%" was held to be anticipated by a teaching of a content "not to exceed about 8%." Therefore, the phrase "about 1%" recited in the instant claims encompasses the phrase "about 2%" in the reference and vice versa, as set by cited precedent.

3) Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Asami et al. in view of Axelrod (US 3,871,334). The rejection is maintained.

Applicant argues Asami teaches much higher amounts of acetic acid than claimed in the present invention. In fact at higher concentrations taught by Asami, the composition becomes increasingly unpalatable, thereby decreasing the animal's desire to eat or chew the treat, chew or toy. Applicant also submits the combined teachings does not teach or suggest a dog treat, chew or toy comprising acetic acid and sodium hexametaphosphate with amounts of acetic acid of about 1%. This argument is not persuasive. Applicant as well as the reference uses the term about 1% and about 2% to about 10%, respectively. The term "about" permits some tolerance. See, for example, In re Ayers, 69 USPQ 109 (CCPA 1946), where "at least about 10%" was held to be anticipated by a teaching of a content "not to exceed about 8%." Therefore, the phrase "about 1%" recited in the instant claims encompasses the phrase "about 2%" in the reference and vice versa, as set by cited precedent.

**Claim Rejections - 35 USC § 103 – Obviousness (New Rejection)**

1) Claims 1, 3 and 6 are rejected under 35 U.S.C. 102(e) as being anticipated by Montgomery (US 6,074,662) in view Stookey (US 5,618,518).

Montgomery teaches animal chews made of rawhide having antimicrobial properties (column 2, lines 58-65). The chews are coated, as recited in claim 6 with cationic antimicrobials and alkali metal salts (column 3, lines 5-13). One of the alkali metal salts specifically named, as having utility in this invention, is an acetic acid salt, as recited in the instant claims (column 3, lines 25-27). The reference differs from the instant claims insofar as it does not teach the compositions comprise sodium hexametaphosphate but discloses sodium hexametaphosphate inhibits tartar formation col. 1, lines 55-58).

Stookey teaches compositions to use against dental calculus in domestic animal. The compositions comprise about 0.5% to 3.0% sodium hexametaphosphate, which acts as a sequestering agent and inhibits tartar growth. The term "about" permits some tolerance. See, for example, In re Ayers, 69 USPQ 109 (CCPA 1946), where "at least about 10%" was held to be anticipated by a teaching of a content "not to exceed about 8%." Therefore, the phrase "about 0.05%" recited in the instant claims encompasses the phrase "about 0.5%" in the reference and vice versa, as set by cited precedent. The chew products such as rawhide chews are soaked in the solution. Other sequestering agents include acetic acid. The reference differs from the instant claim insofar as it does not teach using acetic acid in combination with sodium hexametaphosphate.

It would have been obvious to one of ordinary skill in the art to have incorporated sodium hexametaphosphate in the compositions of the primary reference motivated by the desire to make a compositions with antimicrobial activity as well as enhance anti-tartar activity as taught by the secondary reference.

2) Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Glandorf et al. (US 6,555,094) in view of Axelrod (US 3,871,334).

The primary reference, Glandorf et al., is discussed above and teaches the oral compositions may be incorporated into a relatively supple but strong and durable material such as rawhide, ropes made from natural or synthetic fibers, and polymeric articles made from nylon, polyester or thermoplastic polyurethane. The reference differs from the instant claims insofar as it does not teach the products being nylon bones.

Axelrod teaches a bone that can be molded out of a nylon polymer, which contains permanent odor and flavoring. The nylon provides a substrate that exhibits surface roughening upon being chewed. The chewing action actually produces short tufts or frizzles of material projecting from the surface of the bone. As the dog chews into the bone its teeth sink into the frizzle and the teeth are cleaned by a scouring action of the frizzle. The thickness and location of the frizzle on the surface of the bone varies with the particular animal and its chewing habits (column 3, lines1-15). The reference differs insofar as to not disclose that acetic acid was contained in or on the nylon bone.



It would have been obvious to one of ordinary skill in the art to have incorporated the oral composition of the primary reference into the nylon bone of the secondary reference motivated by the desire to apply therapeutic activity of the composition to the scouring activity of chewing the bone to provide an overall cleaning of the dog's oral cavity, satisfying the dog's chewing habit and provide a more attractive delivery method of the composition to the animal as disclosed by the secondary reference.

3) Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Glandorf et al. (US 6,555,094) in view of Axelrod (US 4,924,811).

The primary reference, Glandorf et al., is discussed above and teaches the oral compositions may be incorporated into a relatively supple but strong and durable material such as rawhide, ropes made from natural or synthetic fibers, and polymeric articles made from nylon, polyester or thermoplastic polyurethane. The reference differs from the instant claims insofar as it does not teach the products being dental floss.

Axelrod teaches a nylon rope with untwisted tassels that are pulled between a dog's teeth in the manner of dental floss (see abstract). The rope will be impregnated with flavor and scents that appeal to the dog (column 2, lines 30-33). The toy will remove plaque and tartar, which is formed between the dog's teeth. It will also divert the dog from destructive chewing behavior possibly involving its owner's personal property, while satisfying the dog's natural urge to chew (column 3, lines 27-35). The secondary

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reference differs from the instant claims insofar as to not disclose acetic acid or sodium hexametaphosphate being present on the rope.

It would have been obvious to one of ordinary skill in the art to have added the oral composition of the primary reference to the rope of the secondary reference motivated by the desire to deliver the oral composition to the animal with the least amount of resistance from the animal by satisfying the dog's natural urge to chew and being able to deliver the composition in between the teeth as well as the oral cavity as disclosed by the secondary reference.

Claims 1-6, 8-10 and 12-15 are rejected.

Claims 7, 11 and 16-20 are cancelled.

No claims allowed.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not

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mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lezah W. Roberts whose telephone number is 571-272-1071. The examiner can normally be reached on 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ardin H. Marschel can be reached on 571-272-0718. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

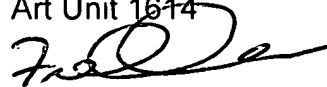
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Lezah Roberts  
Patent Examiner  
Art Unit 1614

A handwritten signature in black ink that reads "Leah Roberts". The signature is written in a cursive style with a long horizontal stroke at the end.

Frederick Krass  
Primary Examiner  
Art Unit 1614

A handwritten signature in black ink that reads "Frederick Krass". The signature is written in a cursive style with a large, looped "F" and a long horizontal stroke at the end.